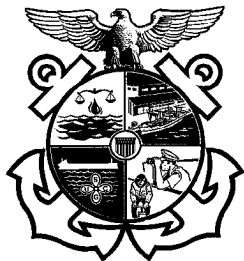


United States Coast Guard



**OFFSHORE SUPPLY VESSEL
INSPECTION BOOK**

Name of Vessel		
Official Number	Class	
Date Completed	Location	
Vessel Built in Compliance with SOLAS: 60 74 74/78 N/A		
Route		
Oceans	Limited Coastwise	Lakes / Bays / Sounds
Coastwise	Great Lakes	Rivers
Inspection Type		
Inspection for Certification (COI)		Reinspection
Inspectors		
1. _____	3. _____	
2. _____	4. _____	

Total Time Spent Per Activity:

Regular Personnel (Active Duty)			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS
-------------------	--------------------

Reserve Personnel			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS
-------------------	--------------------

Auxiliary Resources	
TOTAL BOAT HOURS	TOTAL AIRCRAFT HOURS

Use of Offshore Supply Vessel Inspection Book:

This inspection book is intended to be used as a job aid by Coast Guard marine inspectors during hull and machinery inspections of U.S. flagged offshore supply vessels (OSVs) subject to Subchapter L. For OSVs built prior to March 15, 1996, Subchapter I or Subchapter T may apply; therefore, cites from CG-840 HI, CG-840 MI, or CG-840 T may be referenced. The lists contained within this book are not intended to limit the inspection. Each marine inspector should determine the depth of inspection necessary. A checked box should be a running record of what has been inspected. It does not imply that the entire system has been inspected or that all or any items are in full compliance. This job aid does not constitute part of the official inspection record.

This document does not establish or change Federal laws or regulations. References given are only general guides. Refer to IMO publications, CFR's, NVIC's or any locally produced cite guides for specific regulatory references. Not all items in this book are applicable to all vessels.

NOTE: *Guidance on how to conduct inspections of U.S. flagged offshore supply vessels can be found in the Marine Safety Manual (MSM) Volume II, Chapter 6: Inspection of Vessels for Certification. All MSM cites listed in this book refer to MSM Volume II unless otherwise indicated.*

Pre-inspection Items:

- Review MSIS records.
 - MIPIP
 - MICOI
- Obtain copies of forms to be issued.

Post-inspection Items:

- Issue letters/certificates to vessel.
- Complete MSIS entries.
 - MIAR
 - MSDS
 - MIDR
 - VFLD
 - VFID
- Initiate Report of Violation (ROV) if necessary.

Table of Contents:

Section 1: Administrative Items

IMO Applicability Dates	1
Involved Parties & General Information.....	2
Vessel Information	3

Section 2: Certificates and Documents

Certificates.....	4
Logs and Manuals.....	6
Pollution Prevention Records	7

Section 3: Hull Inspection Items

Navigation Equipment	8
General Health and Safety	9
Structural Integrity	11
Liftboats	13
Bulk Tanks	13
Integral Cargo Tanks.....	14
Ground Tackle	15
Lifesaving Equipment.....	15
Fire Protection.....	21
Pollution Prevention	23

Section 4: Machinery Inspection Items

Diesels.....	25
Electrical Systems.....	26
Pressure Vessels	28
Boilers.....	28
Auxiliary Machinery	30
Marine Sanitation Devices.....	31

Section 5: Drills

Fire Drill	32
Abandon Ship Drill	33

Section 6: Appendices

Vessel Layout	34
Recommended US Vessel Deficiency Procedures.....	36
Deficiency Summary Worksheet.....	37
Conversions	39

Section 1: Administrative Items

IMO Applicability Dates:

Reference	Date
SOLAS 1960	26 MAY 65
SOLAS 1974	25 MAY 80
1978 Protocol to SOLAS 1974	01 MAY 81
1981 Amendments (II-1 & II-2)	01 SEP 84
1983 Amendments (III)	01 JUL 86
<i>Various additional amendments to SOLAS</i>	
MARPOL 73/78 Annex I	02 OCT 83
MARPOL 73/78 Annex II	06 APR 87
MARPOL 73/78 Annex III	01 JUL 92
MARPOL 73/78 Annex V	31 DEC 88
IBC Code	After 01 JUL 86
BCH Code	Prior to 01 JUL 86
COLREGS 1972	15 JUL 77
<i>Various additional amendments to COLREGS</i>	
Load Line 1966	21 JUL 68
STCW 1978	28 APR 84
1991 Amendments	01 DEC 92
1994 Amendments	01 JAN 96
1995 Amendments	01 FEB 97

Involved Parties & General Information:

Vessel's Representatives _____ _____
Phone Numbers

Owner
No Change

Operator—Listed on DOC (if applicable), or COFR
No Change

Vessel Information:

Classification Society	
ISM Issuer: Same as above?	
Yes	No If not the same, which Recognized Organization? _____
<p>NOTE: The period of validity for ISM documents should correspond to the following list. If they do NOT, ISM documents should be further investigated.</p> <p><input type="checkbox"/> 5 years = Full term (SMS and DOC) <input type="checkbox"/> 12 months = Interim (DOC)</p> <p><input type="checkbox"/> 6 months = Interim (SMC) <input type="checkbox"/> 5 months = Short term (SMC)</p>	
Gross Tons	No Change (VFMD)
Net Tons	No Change (VFMD)
Built Date (use delivery date)	No Change (VFCD)
Overall Length (in feet)	No Change (VFMD)

Section 2: Certificates and Documents

Name of Certificate	Issuing Agency	ID #	Port Issued	Issue Date	Exp. Date	Endors. Date
Certificate of Documentation No Change	USCG					
Classification Document No Change						
Certificate of Financial Responsibility (COFR) No Change	USCG					
Safety Construction (SLC) No Change						
Safety Equipment (SLE) No Change	USCG					
Safety Radio (SLT) No Change						
Passenger Ship Safety (PSS) No Change	USCG					
International Load Line (ILL) No Change						

Name of Certificates	Issuing Agency	ID #	Port Issued	Issue Date	Exp. Date	Endors. Date
International Oil Pollution Prevention (IOPP) No Change						
International Tonnage (ITC) No Change						
Safety Management (SMC) No Change						
Document of Compliance (DOC) No Change						
FCC Station License No Change	FCC					
FCC Safety Certificate No Change	FCC					
FCC Operations Permit No Change	FCC					
FCC Marine Radio Operator Permit No Change	FCC					

Certificates:

- | | | |
|--------------------------|--|--|
| <input type="checkbox"/> | COI posted | 46 CFR 126.220
46 CFR 126.240 |
| | <ul style="list-style-type: none">• All pages visible• Number of offshore workers | 46 CFR 126.170 |
| <input type="checkbox"/> | Stability letter posted | 46 CFR 131.930
ICLL Reg. 10(2) |
| <input type="checkbox"/> | Waste management plan
(oceangoing vessels ≥ 40 feet) | 33 CFR 151.57 |
| <input type="checkbox"/> | Annual drug and alcohol program audit | 46 CFR Part 16 |
| <input type="checkbox"/> | Officers' licenses current | |
| <input type="checkbox"/> | GMDSS endorsement | 47 CFR Part 80 |
| | FCC Station License | |
| | Safety Radio Certificate | |
| <input type="checkbox"/> | GMDSS maintenance personnel | 47 CFR 80.1074 |
| | 1 st Class Radiotelegraph Operator's Certificate | |
| | 2nd Class Radiotelegraph Operator's Certificate | |
| | 3rd Class Radiotelegraph Operator's Certificate | |
| <input type="checkbox"/> | Required international safety convention
certificates posted and valid | |
| <input type="checkbox"/> | Liferaft servicing certificates | 46 CFR 160.151-57(p)
46 CFR 131.580
SOLAS 74/78 III/19.8 |
| | <ul style="list-style-type: none">• Annual service | |

Logs and Manuals:

- | | | |
|--------------------------|--|--|
| <input type="checkbox"/> | Bridge logbook | 46 CFR 131.620 |
| | <ul style="list-style-type: none">• Casualties (navigation equipment and steering gear failures reported)• Steering gear test• Communications• Draft / load lines• Stability• Sanitary accommodations• Watertight fittings• Emergency lights / power• Fire and lifeboat drills | 46 CFR 131.110
46 CFR 131.505
46 CFR 131.510
46 CFR 131.513
46 CFR 131.515
46 CFR 131.520
46 CFR 131.525
46 CFR 131.530 |

Notes: _____

- | | | |
|--------------------------|--|--|
| <input type="checkbox"/> | Lifesaving equipment maintenance record | 46 CFR 131.545
SOLAS 74/78 III/19 |
| <input type="checkbox"/> | SOLAS training manual | SOLAS 74/78 III/18.2 |
| <input type="checkbox"/> | Liftboat operating manual | 46 CFR 134.170 |
| | <ul style="list-style-type: none"> • Coast Guard approved • Understandable to crew | |
| <input type="checkbox"/> | Information available to master | 46 CFR 78.17-20
46 CFR 97.15-5
SOLAS 74/78 II-1/22.1 |
| | <ul style="list-style-type: none"> • Loading manual • Trim and stability book | |

Pollution Prevention Records:

- | | | |
|--------------------------|---|------------------------------------|
| <input type="checkbox"/> | Oil record book (Part 1) | MARPOL Ax. I/20
33 CFR 151.25 |
| | <ul style="list-style-type: none"> • Each operation signed by person-in-charge • Each complete page signed by master • Book maintained for 3 years | |
| <input type="checkbox"/> | Shipboard oil pollution emergency plan | MARPOL Ax. I/26.1
33 CFR 151.26 |
| | <ul style="list-style-type: none"> • Approved by Coast Guard / class society • Contact numbers correct • Immediate Actions List | |
| <input type="checkbox"/> | Vessel response plan
(vessels carrying oil as secondary cargo) | 33 CFR 155.1030 |
| | <ul style="list-style-type: none"> • Approved by Coast Guard • Annual review by owner / operator | 33 CFR 155.1065
33 CFR 155.1070 |
| <input type="checkbox"/> | Oil transfer procedures | 33 CFR 155.720 |
| | <ul style="list-style-type: none"> • Posted • List of products carried by vessel • Description of transfer system including a line diagram of piping • Number of persons required on duty • Duties by title of each person • Means of communication • Procedures to top off tanks • Procedures to report oil discharges | |

Notes: _____

Section 3: Inspection Items

Navigation Equipment:

- | | | |
|--------------------------|--|---|
| <input type="checkbox"/> | Navigation publications (as applicable) | 46 CFR 130.330
SOLAS 74/78 V/20 |
| | <ul style="list-style-type: none">• Current and corrected charts• U.S. Coast Pilot• Coast Guard Light List• Notice to mariners• Tide tables• Tidal current tables | |
| <input type="checkbox"/> | Radar | 46 CFR 130.310
SOLAS 74/78 V/12 |
| <input type="checkbox"/> | Compasses | 46 CFR 130.340
SOLAS 74/78 V/12 |
| | <ul style="list-style-type: none">• Lighted magnetic compass• Current deviation table | |
| <input type="checkbox"/> | Test electronic depth sounding device | SOLAS 74/78 V/12 |
| <input type="checkbox"/> | Speed and distance indicator | SOLAS 74/78 V/12 |
| <input type="checkbox"/> | Propulsion shaft tachometer | SOLAS 74/78 V/12 |
| <input type="checkbox"/> | Radio equipment | 33 CFR 26.03
SOLAS 74/78 V/7
SOLAS 74/78 V/12 |
| | <ul style="list-style-type: none">• Radios, RDF, Loran• Electronic position fixing device tested• GMDSS meets requirements for vessel operating area | 46 CFR 133.60
NVIC 9-93 |
| <input type="checkbox"/> | Internal communications and control system | 46 CFR 113.30 |
| | <ul style="list-style-type: none">• EOT failure alarms• Telephones• Voice tubes• Emergency loudspeaker system• Public address system• Pilothouse controls | 46 CFR 113.35

46 CFR 113.50 |

Notes: _____

- | | |
|--|--|
| <input type="checkbox"/> Navigation lights and signals <ul style="list-style-type: none"> • Control panels • Running lights • Anchor lights • Special day and night signals • Distress signals and stowage • Whistle, light, bells, gongs • Day and night signal devices • Certificate of Alternate Compliance | 46 CFR 111.75-17(d)
46 CFR 129.430
72 COLREGS

46 CFR 133.60

33 CFR 81.9 |
| <input type="checkbox"/> Steering gear <ul style="list-style-type: none"> • Main gear tested (all stations) • Auxiliary gear tested (all stations) • Instructions and markings • Rudder angle indicator • Illumination • Alarms • Block diagram | 46 CFR 130.130
46 CFR 130.140
MSM Ch. 14.B

46 CFR 131.845
46 CFR 131.850

46 CFR 130.460 |
| <input type="checkbox"/> EPIRB (406 MHz) <ul style="list-style-type: none"> • Float-free arrangement • Battery date current • Hydrostatic release • Marked with vessel name | 46 CFR 133.60
SOLAS 74/78 IV/7.1.6

46 CFR 131.890 |
| <input type="checkbox"/> 9 GHz radar transponder (SART) <ul style="list-style-type: none"> • Vessels > 300 GT and < 500 require 1 • Vessels > 500 GT require 2 • Stowed so to be rapidly placed in survival craft, or stowed in survival craft | SOLAS 74/78 III/6.2
NVIC 9-93 |

General Health and Safety:

- | | |
|--|---------------------------------|
| <input type="checkbox"/> Emergency lighting <ul style="list-style-type: none"> • Markings | 46 CFR 112.43
46 CFR 131.840 |
|--|---------------------------------|

Notes: _____

- ☐ Accommodations
 - Size 46 CFR 127.280
 - Berthing
 - Seating
 - Ventilation 46 CFR 127.260
 - Lighting and wiring
 - Sanitation 46 CFR 131.515
 - Fire retardant
- ☐ Galley
 - Equipment MSM Ch. 6.P.8
 - Sanitation MSM Ch. 13.C
 - Ventilation 46 CFR 127.260
- ☐ Means of escape from accommodation, machinery, and other spaces
 - Two required (some exceptions)
 - Dead end corridors
 - Absence of locks
 46 CFR 127.240
SOLAS 74/78 II-2/45
- ☐ Gas freeing for repairs
 - Current Gas Chemist Certificate for areas as required
 - Date _____
 - Chemist No. _____
 MSM Ch. 5.I
- ☐ Liquefied petroleum gases for cooking and heating
 - Approved type
 - Cylinder
 - Test dates
 - Stowage
 - Safety relief device
 - Regulators
 - Piping and fittings
 - Location
 46 CFR 129.550
46 CFR 61.15-10

Notes: _____

- ☐ Paint stowage
 - Fireproof / metal lined 46 CFR 127.220
 - Lighting / electrical 46 CFR 129.520
 - Fire protection 46 CFR 132.310
- ☐ Storerooms
 - Stowage
 - Fire hazards
 - Lighting and wiring

Structural Integrity:

- ☐ Hull structure (list inaccessible compartments or areas) 46 CFR 126.430
ICLL 66 Reg. 1
 - Decks
 - Shell
 - Bulkheads
 - Tank tops
 - Strength members
 - Approved plans available 46 CFR 126.150
- ☐ Hull openings and closures 46 CFR 42.15
MSM Ch. 6.F.5
ICLL 66 Regs. 12 - 23
 - Air ports and dead covers
 - Closing devices, gaskets
 - Light / water test
 - Closed prior to departure 46 CFR 131.520
- ☐ Deck openings and closures MSM Ch. 6.F.5
ICLL 66 Regs. 12 - 20
 - Closing devices, gaskets
 - Light / water test
 - Closed prior to departure 46 CFR 131.520
- ☐ Guards, ladders, rails, and gangways 46 CFR 127.310
(including accommodation ladders or pilot 46 CFR 127.320
ladders) 46 CFR 127.330
ICLL 66 Reg. 25

Notes: _____

- | | | |
|--------------------------|---|---------------------------------------|
| <input type="checkbox"/> | Watertight doors in subdivision bulkhead tested | 46 CFR 170.270 |
| | <ul style="list-style-type: none"> • Local and remote control • Alarms • Markings | 46 CFR 131.893 |
| <input type="checkbox"/> | Exercise valves and controls | 46 CFR 115.804 |
| | <ul style="list-style-type: none"> • Bilge valves • Overboard discharge valves • Emergency shutoff valves • Scupper valves • Remote controls • Reach rods | |
| <input type="checkbox"/> | Bilge wells, cofferdams, and suctions | 46 CFR 56.50-50 |
| <input type="checkbox"/> | Bulkhead penetrations | 46 CFR 128.230
MSM Ch. 6.F.6 |
| <input type="checkbox"/> | Hull marks | 46 CFR 67.120 |
| | <ul style="list-style-type: none"> • Name • Hailing port • Official number • Net tonnage | |
| <input type="checkbox"/> | Draft marks | 46 CFR 131.220 |
| | <ul style="list-style-type: none"> • Legible • Properly sized • Properly spaced | |
| <input type="checkbox"/> | Load line marks | 46 CFR 131.230
ICLL 66 Regs. 4 - 9 |
| | <ul style="list-style-type: none"> • Conform to certificate • Legible | |
| <input type="checkbox"/> | Cranes in absence of Cargo Gear Certificate | 46 CFR 126.130 |
| | <ul style="list-style-type: none"> • Records • Safe Working Load markings | |

Notes: _____

Liftboats:

NOTE: Guidance for inspecting liftboats on OSVs is detailed in NVIC 8-91.

- ☐ Legs 46 CFR 134.140
 - Jacking points
 - Pin holes
- ☐ Jacking systems 46 CFR 134.150
 - Loss of power alarm
 - Low hydraulic fluid level alarm
- ☐ Freeboard markings 46 CFR 134.160
- ☐ Firemain suction 46 CFR 134.180
 - Distortion
 - Flanged
 - Attachments

Bulk Tanks:

- ☐ Bulk cargo pressure tanks internally examined 46 CFR 61.10
 - Pumps and controls
 - Relief valves
 - Piping-valves
 - Lighting and wiring
 - Cofferdams

Service	MAWP	Date Tested or Examined Internally	Relief Valve Tested
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Notes: _____

Integral Cargo Tanks:

- ☐ Pumps MSM Ch. 10.C.4
 - Pumps and controls 33 CFR 155.780
 - Relief valves
 - Piping-valves
- ☐ Cargo piping 46 CFR 56.30
 - Expansion joints 46 CFR 56.35
 - Supports
 - Hoses 33 CFR 155.800
 - Valves 46 CFR 56.20
- ☐ Cargo tank venting 46 CFR 32.55
MSM Ch. 10.C.4
 - Independent goosenecks
 - Flame screen
 - Closure device
- ☐ Explosion-proof fixtures 46 CFR 111.105
- ☐ Independent tanks, fixed, portable, or marine portable 46 CFR 125.110
46 CFR 125.120
 - Approved marine portable tank 46 CFR Part 64
 - Approved IM portable tank 46 CFR 98.30-2
 - External examination
 - Date of internal examination _____
 - Date of hydrostatic test _____
 - Metal information plate
 - Marking and labeling
 - Saddles; foundation and stowage
 - Piping and valves
 - Relief valves
 - Lifting fittings
 - Securing devices
 - Pump and controls
 - Cargo hose
 - Electrical grounding
 - Firefighting requirements 46 CFR 132.370
 - Authorized cargo
 - Firefighting

Notes: _____

Ground Tackle:

- ☐ Anchors 46 CFR 130.240
ABS Rules
 - Tested
 - Windlass
 - Capstans
- ☐ Mooring and towing gear 46 CFR 130.250

Lifesaving Equipment:

NOTE: General maintenance and tests and inspections of lifesaving equipment is detailed in 46 CFR 131.545 and 46 CFR 133.45, respectively.

- ☐ General alarms 46 CFR 113.25
46 CFR 129.530
 - Controls
 - Batteries and fuses
 - Tested
 - Markings 46 CFR 131.805
 - Bell locations audible 46 CFR 131.810
 - Lights for high-noise areas 46 CFR 113.25-10
- ☐ Lifeboats stripped, cleaned, and inspected 46 CFR 133.105(a)(6)
46 CFR 199.190(f)
 - Date of annual servicing _____ 46 CFR 199.201
 - Hull and fittings 46 CFR 199.202
 - Tanks and fittings 46 CFR 199.261
 - Cradles 46 CFR 199.262
 - Gripes SOLAS 74/78 III/19.2
 - Compressed air cylinders SOLAS 74/78 III/26
 - Markings MSM Ch. 6.R.3.e
 - 46 CFR 199.176
- ☐ Rescue boat 46 CFR 133.135
 - Approved
 - Required equipment 46 CFR 133.175

Notes: _____

- ☐ Lifeboat and rescue boat equipment and stowage (use table below to determine required equipment)

46 CFR 133.175
SOLAS 74/78 III/41

Item Number	Item	International (LB)/ Oceans (RB)		Short International (LB)/ Coastwise (RB)	
		Lifeboat (LB)	Rescue Boat (RB)	Lifeboat (LB)	Rescue Boat (RB)
1	Bailer	1	1	1	1
2	Bilge pump ¹	1		1	
3	Boathook	2	1	2	1
4	Bucket ²	2	1	2	1
5	Can opener	3		3	
6	Compass	1	1	1	1
7	Dipper	1		1	
8	Drinking cup	1		1	
9	Fire extinguisher	1	1	1	1
10	First aid kit	1	1	1	1
11	Fishing kit	1			
12	Flashlight	1	1	1	1
13	Hatchet	2		2	
14	Heaving line	2	2	2	2
15	Jackknife	1		1	
16	Knife ³		1		1
17	Ladder	1	1	1	1
18	Mirror, signalling	1		1	
19	Oars, units ⁴	1	1	1	1
20	Painter	2	1	2	1
21	Provisions (units/persons)	1			
22	Pump ⁵		1		1
23	Radar reflector	1	1	1	1
24	Rainwater collection device	1		1	
25	Repair kit ⁶		1		1
26	Sea anchor	1	1	1	1
27	Searchlight	1	1	1	1
28	Seasickness kit (units/person)	1		1	

Item Number	Item	International (LB)/ Oceans (RB)		Short International (LB)/ Coastwise (RB)	
		Lifeboat (LB)	Rescue Boat (RB)	Lifeboat (LB)	Rescue Boat (RB)
29	Signal, smoke	2		2	
30	Signal, hand flare	6		6	
31	Signal, parachute flare	4		4	
32	Skates and fenders ⁶	1		1	
33	Sponge ⁵		2		2
34	Survival instructions	1		1	
35	Table of lifesaving signals	1		1	
36	Thermal protective aids ⁷	10%	10%	10%	10%
37	Tool kit	1		1	
38	Tow line ⁸	1	1	1	1
39	Water (liters/person)	3		3	
40	Whistle	1	1	1	1

Footnotes:

- 1 Not required for boats of self-bailing design.
- 2 Not required for inflated or rigid-inflated rescue boats.
- 3 A hatchet counts towards this requirement in rigid rescue boats.
- 4 Oars are not required on a free-fall lifeboat; a unit of oars means the number of oars specified by the boat manufacturer.
- 5 Not required for a rigid rescue boat.
- 6 Required if specified by the boat manufacturer.
- 7 Sufficient thermal protective aids are required for at least 10% of the persons the survival craft is equipped to carry, but not less than two.
- 8 Required only if the lifeboat is also the rescue boat.

- ☐ Disengaging apparatus examined or tested and marked as required 46 CFR 199.45(b)
SOLAS 74/78 III/41
MSM Ch. 6.R.3.a
- Universal joints
 - Safety latches
 - Hooks
 - Locking knuckles
 - Frame

Notes: _____

☐ Radio installation for lifeboats complies with FCC and/or international convention (where required)*
46 CFR 199.60
SOLAS 74/78 III/6
MSM Ch. 6.R.3.I

- Portable
- Fixed

☐ Lifeboat operational test*
46 CFR 199.45(b)
SOLAS 74/78 III/19
MSM Ch. 6.R.3.a

- Engine operating test
- Cooling water pump
- Ahead and astern test
- Fuel tanks
- Searchlight test (passenger vessels)
- Annual fuel changed
- Extinguishers serviced

* Items tested in conjunction with Abandon Ship Drill.

☐ Davits
46 CFR 160.032
SOLAS 74/78 III/48
MSM Ch. 6.R.3.a

- Foundations
- Moving parts
- Fittings
- Fairleads, cleats, or cruciform bits

☐ Falls (date last renewed or end-for-ended)
46 CFR 199.190(j)
SOLAS 74/78 III/48
MSM Ch. 6.R.3.a(1)

☐ Lifeboat winches
46 CFR 199.199(i)
SOLAS 74/78 III/19
MSM Ch. 6.R.3.a

- Brakes
- Controls
- Cranks
- Covers
- Limit switches and electrical controls

☐ Lifeboat weight test
46 CFR 199.45(b)
SOLAS 74/78 III/19
MSM Ch. 6.R.3.a

- Light load
- Full load: date _____

Notes: _____

- | | |
|---|--|
| <input type="checkbox"/> Embarkation aids <ul style="list-style-type: none"> • Ladders • Access • Spans and lifelines • Illumination • Frapping and tricing lines | 46 CFR 199.190(f)
SOLAS 74/78 III/11
MSM Ch. 6.R.3.t |
| <input type="checkbox"/> Liferafts <ul style="list-style-type: none"> • Releasing gear • Launching instructions posted • Equipment and stowage • Annual service dates <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>
• Hydro release service dates <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>
• Weak link • Float-free • Illumination • Markings • Capacities • Launching devices tested | 46 CFR 133.105
SOLAS 74/78 III/19
SOLAS 74/78 III/26
MSM Ch. 6.R.3.f
46 CFR 133.90
46 CFR 131.130
46 CFR 133.45
46 CFR 131.580

46 CFR 133.45
46 CFR 131.585
MSM Ch. 6.R.3.h

46 CFR 133.130

46 CFR 112.43-11
46 CFR 131.865

MSM Ch. 6.R.3.d |
| <input type="checkbox"/> Lifefloats and inflatable buoyant apparatus <ul style="list-style-type: none"> • Equipment • Markings • Stowage • Weak link • Float-free • Sea painter | 46 CFR 133.105
46 CFR 131.865
46 CFR 131.870
46 CFR 133.130 |

Notes: _____

- | | |
|---|---|
| <input type="checkbox"/> Ring lifebuoys <ul style="list-style-type: none"> • Lights • Lines • Smoke signals • Markings | 46 CFR 133.70
SOLAS 74/78 III/7
SOLAS 74/78 III/21
SOLAS 74/78 III/27
MSM Ch. 6.R.3.i
46 CFR 131.875 |
| <input type="checkbox"/> Line-throwing apparatus <ul style="list-style-type: none"> • Equipment • Required drills held • Magazine • Type | 46 CFR 133.170 |
| <input type="checkbox"/> Lifejackets
Total _____ | 46 CFR 133.70
SOLAS 74/78 III/7.2.2
MSM Ch. 6.R.3.m |
| <ul style="list-style-type: none"> • Retro-reflective tape • Lights • Whistles • Stowage • Number of lifejackets rejected by inspector _____ | 46 CFR 131.875
MSM Ch. 6.R.3.q |
| <input type="checkbox"/> Lifejacket stowage <ul style="list-style-type: none"> • Required notices and markings • Wearing instructions | 46 CFR 133.70
SOLAS 74/78 III/7.2
46 CFR 131.875
46 CFR 133.80 |
| <input type="checkbox"/> Work vests <ul style="list-style-type: none"> • Approved type • Stowage | 46 CFR 131.720
46 CFR 131.710
46 CFR 131.730 |
| <input type="checkbox"/> Immersion suits <ul style="list-style-type: none"> • Condition • Retro-reflective tape • Markings | 46 CFR 133.70
SOLAS 74/78 III/21.4,
27.3, 30.2.7
MSM Ch. 6.R.3.n
46 CFR 131.875 |
| <input type="checkbox"/> Placard of lifesaving signals | 46 CFR 131.950
SOLAS 74/78 V/16 |
| <input type="checkbox"/> Emergency instructions | 46 CFR 133.80 |
| <input type="checkbox"/> Station bill posted | 46 CFR 131.350 |

Notes: _____

Fire Protection Equipment:

NOTE: General maintenance, and test and inspection requirements of firefighting equipment are detailed in 46 CFR 131.590 and 46 CFR 132.350, respectively.

- ☐ **Fire control plan** 46 CFR 131.945
SOLAS 74/78 II-2/20
- Permanently posted
 - Copy permanently stored in weathertight container outside deckhouse
- ☐ **Fire detection systems** SOLAS 74/78 II-2/13
SOLAS 74/78 II-2/11.8
SOLAS 74/78 II-2/53
NVIC 7-80
- Smoke / fire alarms
 - Remote pull stations
 - Smoke / flame / heat detectors and sensors 46 CFR 130.470
- ☐ **Portable extinguishers** 46 CFR 132.210
46 CFR 132.220
SOLAS 74/78 II-2/6
SOLAS 74/78 II-2/21
MSM Ch. 18.1.3
NVIC 7-70&NVIC 13-86
46 CFR 131.835
46 CFR 132.230
- Annually serviced
 - Bottles hydrostatically tested (every 5 years)
 - Markings (weight and hydrostatic test date)
 - Spare charges, spare extinguishers

Location	Required		On Board	
	Number	Class	Number	Class

- ☐ **Semiportable extinguishers** 46 CFR 132.210
46 CFR 132.220
SOLAS 74/78 II-2/6
SOLAS 74/78 II-2/21
MSM Ch. 18.1.4
- Bottles weighed annually
 - Bottles hydrostatically tested (every 12 years)
 - Controls, instructions, markings
 - Hose and diffuser
 - Flexible loops tested or replaced (same as bottle)

Notes: _____

- | | |
|--|---|
| <input type="checkbox"/> Fixed fire extinguishing systems <ul style="list-style-type: none"> • Controls and instructions • Alarms tested • Piping • Heads, distribution • Bottles weighed annually • Bottles hydrostatically tested (every 12 years) • Flexible loops tested or replaced (10% per year) • Markings • Storage space / door • Vent stops | 46 CFR 132.350
SOLAS 74/78 II-2/21
MSM Ch. 18.I.9
NVIC 6-72, Change 1
NVIC 8-73

46 CFR 131.815
46 CFR 131.820
46 CFR 131.825
46 CFR 131.899 |
| <input type="checkbox"/> Fire main system and stations <ul style="list-style-type: none"> • Pumps • Piping • Cut-off valves • Drains | 46 CFR 132.100
NVIC 6-72, Change 1
SOLAS 74/78 II-2/4
SOLAS 74/78 II-2/21
46 CFR 132.110
46 CFR 132.130 |
| <input type="checkbox"/> Fire stations <ul style="list-style-type: none"> • Hydrants (2 effective streams) • Nozzles and spanners • Fog applicators (<6 feet in length, in engineroom) • Hose <ul style="list-style-type: none"> – UL approved – Correct length • Markings • Equipment compatible | 46 CFR 132.100
NVIC 6-72, Change 1
SOLAS 74/78 II-2/4
SOLAS 74/78 II-2/21
MSM Ch. 18.I.9
MSM Ch. 19.I.7

46 CFR 131.830 |
| <input type="checkbox"/> Total length of all hose tested _____ <ul style="list-style-type: none"> • Hydrostatically tested to at least 100 psi • Approved hose • Markings | 46 CFR 132.130
46 CFR 132.350
MSM Ch. 18.I.6
46 CFR 131.880 |
| <input type="checkbox"/> Pumps <ul style="list-style-type: none"> • Controls and gauges • Relief valves | 46 CFR 132.120 |

Notes: _____

- | | | |
|--------------------------|---|--|
| <input type="checkbox"/> | Structural fire protection | 46 CFR 127.220
SOLAS 74/78 II-2/42 |
| | <ul style="list-style-type: none"> • Bulkheads • Insulation | |
| <input type="checkbox"/> | Remote controls to power ventilation marked and tested | 46 CFR 111.103-1
46 CFR 129.540
46 CFR 131.896 |
| <input type="checkbox"/> | Closures for spaces protected by fixed smothering systems | 46 CFR 127.250 |
| <input type="checkbox"/> | International shore connection | SOLAS 74/78 II-2/19 |
| <input type="checkbox"/> | Fire axe | 46 CFR 132.360
46 CFR 131.880 |
| | <ul style="list-style-type: none"> • Markings • 1 axe if vessel is < 100 GT • 2 axes if vessel is > 100 GT | |

Pollution Prevention:

NOTE: Guidance for inspecting pollution prevention items is detailed in MSM Volume II, Chapter 31. Vessels inspected under Subchapter L are required to meet 33 CFR Parts 151, 155, and 156.

- | | | |
|--------------------------|--|-----------------------------------|
| <input type="checkbox"/> | Pollution placard posted | 33 CFR 155.450
MSM Ch. 31.D.13 |
| <input type="checkbox"/> | MARPOL V placard posted | 33 CFR 151.59 |
| <input type="checkbox"/> | Person-in-charge designation | 33 CFR 155.700 |
| <input type="checkbox"/> | Fuel oil containment | 33 CFR 155.320 |
| | <ul style="list-style-type: none"> • Portable • Fixed | |
| <input type="checkbox"/> | Cargo oil containment | |
| | <ul style="list-style-type: none"> • Size • Scupper closures • Drains | |

Notes: _____

- | | | |
|--------------------------|--|----------------|
| <input type="checkbox"/> | Oily waste retention | MSM Ch. 31.D.7 |
| | <ul style="list-style-type: none"> • Bilge • Tank | |
| <input type="checkbox"/> | Ballast discharge | 33 CFR 155.330 |
| | <ul style="list-style-type: none"> • Acceptable processing equipment | 33 CFR 155.350 |
| | | 33 CFR 155.360 |
| | | 33 CFR 155.370 |
| | | MSM 31.D.10 |
| <input type="checkbox"/> | Oily bilge discharge | 46 CFR 155.380 |
| | <ul style="list-style-type: none"> • Piping system • Stop valve • Outlet • Pump stop | |
| <input type="checkbox"/> | Prohibited oil spaces | 33 CFR 155.470 |
| <input type="checkbox"/> | Emergency shutdown | 33 CFR 155.780 |
| <input type="checkbox"/> | Oil transfer hose | 33 CFR 155.800 |
| | <ul style="list-style-type: none"> • Condition • Markings • Hose assembly requirements • Record of tests and inspections | |
| <input type="checkbox"/> | Garbage | 33 CFR 151.63 |
| | <ul style="list-style-type: none"> • Shipboard garbage properly disposed | MARPOL Ax. V/3 |
| <input type="checkbox"/> | Discharge removal equipment | 33 CFR 155.220 |

Notes: _____

Section 4: Machinery Inspection Items

Diesels:

- | | | |
|--------------------------|---|--|
| <input type="checkbox"/> | Propulsion machinery | 46 CFR 58.05
SOLAS 74/78 II-1/27 |
| | <ul style="list-style-type: none">• Safety devices• Foundations• Guards• Propulsion controls | 46 CFR 130.120 |
| <input type="checkbox"/> | Main propulsion diesels | 46 CFR 58.05
46 CFR 58.10
SOLAS 74/78 II-1/27 |
| | <ul style="list-style-type: none">• Fuel lines• Air starting lines• Exhaust system<ul style="list-style-type: none">– Protective devices• Lube oil system• Engine protection<ul style="list-style-type: none">– Remote shutdowns– Overspeed protection– Low lube oil– High temperature– Crank case• Explosion covers | 46 CFR 128.320 |
| <input type="checkbox"/> | Fuel systems | 46 CFR 56.50-65 |
| | <ul style="list-style-type: none">• Service and transfer pumps• Remote shutoff valves | |
| <input type="checkbox"/> | Automation | 46 CFR Part 62
SOLAS 74/78 II-1/46-54
MSM Vol. IV Ch. 3.L
NVIC 1-78, Change 1
NVIC 1-69
NVIC 6-84 |
| | <ul style="list-style-type: none">• Reduced manning<ul style="list-style-type: none">YesNo• Approved test procedure• Satisfactory test• Reviewed logs/records• Interviewed personnel | 46 CFR 62.50
46 CFR 62.30-10 |

Notes: _____

Electrical Systems:

NOTE: Guidance for inspecting electrical system items is detailed in NVIC 2-89.

- | | | |
|--------------------------|--|---|
| <input type="checkbox"/> | Ship's service generators | 46 CFR 110.10
46 CFR 111.12
46 CFR 129.315
46 CFR 129.320
SOLAS 74/78 II-1/41
MSM Ch. 6.L.4.c
MSM Vol. IV Ch. 3.D.2 |
| | <ul style="list-style-type: none">• Protective guards• Reverse power relay• Overspeed trip (> 110% < 115%)• Low oil pressure alarm / shutdown | |
| <input type="checkbox"/> | Switchboards (including emergency) | 46 CFR 129.330
MSM Ch. 6.L.4.g |
| | <ul style="list-style-type: none">• Automatic bus transfer• Ground detectors• Personnel safeguards (guards, rails, mats, etc.)• Drip shields• Warning notices posted• Circuit breaker ratings | MSM Ch. 6.L.5.g |
| <input type="checkbox"/> | Panelboards | 46 CFR 129.330 |
| | <ul style="list-style-type: none">• Overcurrent devices• Circuit directory• Locking device | |
| <input type="checkbox"/> | Motor controllers | 46 CFR 111.70
MSM Ch. 6.L.4.i |
| | <ul style="list-style-type: none">• Drip shields• Disconnect switch• Wiring diagram posted• Remote shutdowns tested | |
| <input type="checkbox"/> | Ventilation systems | 46 CFR 127.250
SOLAS 74/78 II-1/48 |
| | <ul style="list-style-type: none">• Remote shutdown tested• Machinery space fans | |
| <input type="checkbox"/> | Ship's service lighting systems | 46 CFR 111.75 |
| | <ul style="list-style-type: none">• Panelboards• Circuit directory• Circuit breakers• Globes and guards• Explosion-proof or watertight (where required) | 46 CFR 111.40
46 CFR 129.410 |

Notes: _____

<input type="checkbox"/>	Emergency generator tested	46 CFR 112.25 46 CFR 112.50 SOLAS 74/78 II-1/42-44
	<ul style="list-style-type: none"> Starting system Fuel system Overspeed trip (> 110% < 115%) Low oil pressure alarm / shutdown High jacket water temperature alarm Fixed firefighting system shutdown 	
<input type="checkbox"/>	Batteries	46 CFR 129.350 46 CFR 129.356
	<ul style="list-style-type: none"> Protection Charger Ventilation 	
<input type="checkbox"/>	Adequate emergency power and lighting	46 CFR 129.440 46 CFR 129.450 MSM Ch. 6.N
	<ul style="list-style-type: none"> Tested 	
<input type="checkbox"/>	Internal communications and control system	46 CFR 133.60
	<ul style="list-style-type: none"> General alarms <ul style="list-style-type: none"> Power supply Telephones Fire detection and alarm systems Steering gear alarm and indicator 	46 CFR 113.25 46 CFR 129.530 46 CFR 113.30 46 CFR 113.10 46 CFR 113.43 46 CFR 130.110
<input type="checkbox"/>	General electrical installation	46 CFR 111.01-1 SOLAS 74/78 II-1/40 46 CFR 129.340
	<ul style="list-style-type: none"> Cable / wiring Jury rigs Connection boxes Dead-end cables Splices Grounding Personnel safeguards Hazardous locations Portable electrical equipment 	MSM Ch. 6.L.5.h 46 CFR 111.60-17 46 CFR 111.60-19 46 CFR 111.05 46 CFR 129.370 46 CFR 129.375 46 CFR 111.105 MSM Vol. IV Ch. 3.C.2.f MSM Ch. 6.L.5.i

Notes: _____

Pressure Vessels:

- ☐ Pressure vessels hydrostatically tested or internally examined
46 CFR 61.10
MSM Ch. 6.Q
MSM Vol. IV Ch. 3.I.7

Service	MAWP	Date Tested or Examined Internally	Relief Valve Tested
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

- ☐ Relief valve springs set within range
46 CFR 54.15-10(g)

Boilers:

- ☐ Automatic auxiliary boilers
MSM Ch. 6.H
- Controls and safety devices
46 CFR 63.15-1
 - Fuel systems
46 CFR 63.20
 - Alarms
46 CFR 63.15-3
 - Inspections / test
46 CFR 63.15-7
46 CFR 63.15-9

- ☐ Periodic test and inspection of boilers in accordance with 46 CFR Table 61.05-10

Boiler ID Number	Date Hydrostatically Tested	Date Mountings Opened	Date Mountings Removed and Studs Examined	Fireside	Waterside	External

Notes: _____

- ☐ Safety valves
- Escape pipes
 - Drains
- 46 CFR 52.01-120
MSM Vol. IV Ch. 3.I.2.c
46 CFR 56.50-25

Boiler	Date Set and Sealed	Pressure Setting

- ☐ Fusible plugs
- Examined
- Renewed at this inspection
- 46 CFR 52.01-50
46 CFR Table 61.05-10
MSM Vol. IV Ch. 3.I.3.b

- ☐ Boiler repairs in accordance 46 CFR Part 59

- ☐ Low pressure heating boilers
- Safety or relief valves
 - Gauges
 - Thermometers
 - Automatic controls
 - Bottom blow off
 - Water level indicator
 - Connections
 - Refractory
- 46 CFR 53.01
46 CFR 53.05
46 CFR 53.12

- ☐ Periodic test and inspection of low pressure heating boilers in accordance with 46 CFR Table 61.05-10

Boiler Number	Date Hydrostatically Tested	Fireside	Waterside	External

Notes: _____

Auxiliary Machinery:

- | | | |
|--------------------------|--|----------------------------------|
| <input type="checkbox"/> | Bilge and ballast systems | 46 CFR 128.440 |
| | <ul style="list-style-type: none">• Pumps• Eductors• Emergency bilge pump• Manifold, valves, and piping• Remote controls (hydraulic, pneumatic, manual, electric)• Strainers• Sounding and vent piping• Markings and indicators• Alarm | 46 CFR 130.460 |
| <input type="checkbox"/> | Sea suctions and overboard discharges | MSM Ch. 8.F |
| <input type="checkbox"/> | Nonmetallic expansion joints | 46 CFR 61.15-12
MSM Ch. 8.F.3 |
| | <ul style="list-style-type: none">• External exam• 10-year service replacement | |
| <input type="checkbox"/> | Compressed air system | 46 CFR 58.30 |
| | <ul style="list-style-type: none">• Compressor• Controls and gauges• Relief valves | |
| <input type="checkbox"/> | Refrigeration and air conditioning systems | 46 CFR 128.410 |
| <input type="checkbox"/> | Freshwater systems | |
| | <ul style="list-style-type: none">• Pumps• Valves and controls• Air cushion supply line | |

Notes: _____

Marine Sanitation Devices:

NOTE: Guidance for inspecting marine sanitation devices is detailed in MSM Volume II, Chapter 18.K. Vessels inspected under Subchapter L are required to meet 33 CFR Part 159.

- | | | |
|--------------------------|--|--|
| <input type="checkbox"/> | Marine sanitation device | 33 CFR 159.55
MSM Ch. 31.F |
| | Type I | |
| | Type II | |
| | Type III | |
| <input type="checkbox"/> | Certified for inspected vessels | MSM Ch. 31.F.4 |
| <input type="checkbox"/> | Capacity satisfactory | MSM Ch. 18.K.7.d |
| <input type="checkbox"/> | Installation | 33 CFR 159.57
MSM Vol. IV Ch. 3.K.1 |
| | • Operation | |
| | • Ventilation | |
| | • Wiring and piping | |
| | • Maintenance | |
| | • Placard posted | 33 CFR 159.59 |
| | • Safety | |
| | • Accessibility to parts requiring routine servicing | |
| | • Manufacturer's instructions available | |

Notes: _____

Section 5: Drills

☐ **Fire Drill:**

Initial notifications	Familiarity with duties	Space isolation
General alarms / signals	Familiarity with equipment	Smoke control
Crew response	Fire pumps started	Arrange care of passengers
Properly dressed / equipped	Two jets of water	Communications w/ bridge
Language understood by crew	Fire doors and dampers	

(SOLAS 74/78 III/18.3; MSM Vol. II/22.C.7.i; NVIC 6-91)

Location: _____ Time on Scene: _____

Notes: _____

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

General alarms / signals

Familiarity with duties

Boat release

Muster lists

Provide equipment

Boat operation

Muster of crew / passengers

Familiarity with equipment

Egress procedures

Crew response

Lower lifeboat

Davit-launched liferaft drill

Language understood by crew

Brake operation

Communication w/ bridge

Lifejackets

Engine start

Lighting

(SOLAS 74/78 III/18.3; MSM Vol. II/22.C.7.h)

Location:

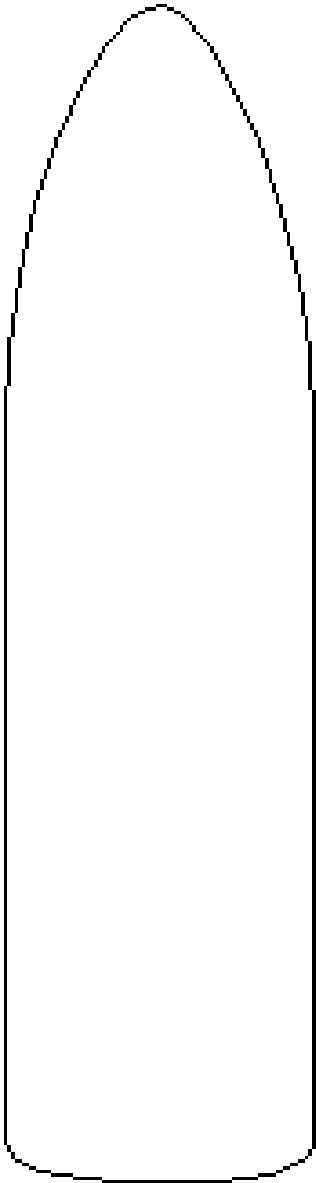
Time to Water: _____

Notes:

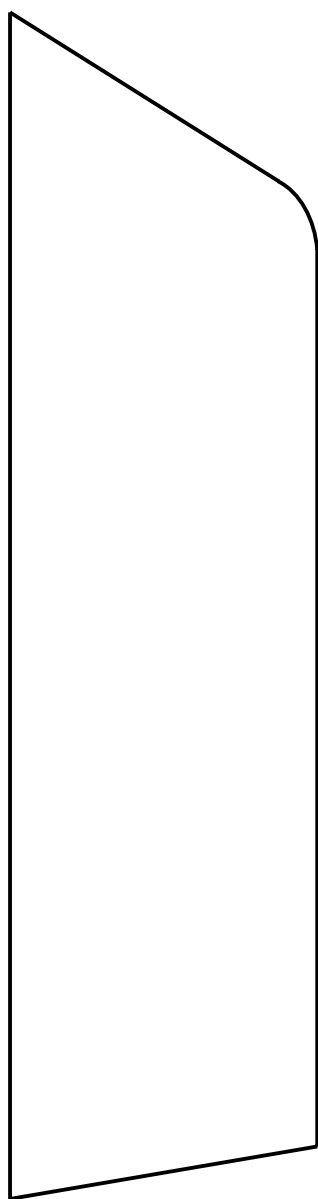
This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Section 6: Appendices

Vessel Layout:



- Ballast tanks
- Deckhouse location
- Deck cranes
- Fuel tanks
- Cargo tanks
- Peak tanks
- Legs



Recommended US Vessel Deficiency Procedures:

Step	Action								
1	Identify deficiency.								
2	Inform vessel representative.								
3	Record on the <i>Deficiency Summary Worksheet</i> (next page).								
4	If deficiency is corrected prior to end of inspection, go to Step 7.								
5	<p>If deficiency is unable to be corrected prior to end of inspection, issue CG-835 in accordance with table below.</p> <table border="1"> <thead> <tr> <th>IF deficiency:</th><th>THEN issue CG-835:</th></tr> </thead> <tbody> <tr> <td> <p>Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,</p> <ul style="list-style-type: none"> • Missing placards • Non-metallic expansion joints if more than 10 years in service </td><td> <p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> • "X" number of days • At next drydock </td></tr> <tr> <td> <p>Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Expired international certificates • Automation defect • Insufficient lifesaving equipment </td><td> <p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> • Reduced route • Increased crew • Fewer offshore workers </td></tr> <tr> <td> <p>DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Missing or defective firefighting equipment • Structural defect or damage </td><td> <p>That requires the deficiency to be corrected prior to operating vessel ("NO SAIL" item), e.g.,</p> <ul style="list-style-type: none"> • Prior to carrying offshore workers • Prior to carrying cargo </td></tr> </tbody> </table>	IF deficiency:	THEN issue CG-835:	<p>Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,</p> <ul style="list-style-type: none"> • Missing placards • Non-metallic expansion joints if more than 10 years in service 	<p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> • "X" number of days • At next drydock 	<p>Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Expired international certificates • Automation defect • Insufficient lifesaving equipment 	<p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> • Reduced route • Increased crew • Fewer offshore workers 	<p>DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Missing or defective firefighting equipment • Structural defect or damage 	<p>That requires the deficiency to be corrected prior to operating vessel ("NO SAIL" item), e.g.,</p> <ul style="list-style-type: none"> • Prior to carrying offshore workers • Prior to carrying cargo
IF deficiency:	THEN issue CG-835:								
<p>Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,</p> <ul style="list-style-type: none"> • Missing placards • Non-metallic expansion joints if more than 10 years in service 	<p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> • "X" number of days • At next drydock 								
<p>Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Expired international certificates • Automation defect • Insufficient lifesaving equipment 	<p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> • Reduced route • Increased crew • Fewer offshore workers 								
<p>DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Missing or defective firefighting equipment • Structural defect or damage 	<p>That requires the deficiency to be corrected prior to operating vessel ("NO SAIL" item), e.g.,</p> <ul style="list-style-type: none"> • Prior to carrying offshore workers • Prior to carrying cargo 								
6	Enter CG-835 data in MIDR.								
7	Enter deficiency data in MSDS.								
8	Initiate Report of Violation (ROV) if necessary.								

Deficiency Summary Worksheet:

Name of Vessel

VIN[illegible]

[illegible]

Deficiencies identified should be listed with MSIS codes. At completion of inspection/examination, any outstanding deficiencies shall be entered in MIDR or PSDR as appropriate. All deficiencies found (outstanding and completed) shall be entered in the Deficiency Summary. Worklist items, which serve only as memory joggers to complete inspection/examination (e.g., test emergency fire pump), should not be coded as deficiencies.

MSIS Codes for Deficiencies:

BS	Ballast	DC	Dry Cargo	IC	I/C Engine
BI	Bilge	ES	Electrical	LS	Lifesaving
BA	Boiler, Aux.	FF	Firefighting	MI	Miscellaneous
BM	Boiler, Main	FL	Fuel	NS	Navigation
CS	Cargo	GS	General Safety	PP	Propulsion
DM	Deck Machinery	HA	Habitation	SS	Steering
DL	Doc., Lics., Pmts.	HU	Hull		

Conversions:

Distance and Energy				
Kilowatts (kW)	X	1.341	=	Horsepower (hp)
Feet (ft)	X	3.281	=	Meters (m)
Long Ton (LT)	X	.98421	=	Metric Ton (t)
Liquid <i>(NOTE: Values are approximate.)</i>				
Liquid	bbbl/LT	m³/t	bbbl/m³	bbbl/t
Freshwater	6.40	1.00	6.29	6.29
Saltwater	6.24	.975	6.13	5.98
Heavy Oil	6.77	1.06	6.66	7.06
DFM	6.60	1.19	7.48	8.91
Lube Oil	7.66	1.20	7.54	9.05
Weight				
1 Long Ton	= 2240 lbs	1 Metric Ton	= 2204 lbs	
1 Short Ton	= 2000 lbs	1 Cubic Foot	= 7.48 gal	
1 Barrel (oil)	= 5.61 ft = 42 gal = 6.29 m³	1 psi	= .06895 Bar = 2.3106 ft of water	
Temperature: Fahrenheit = Celsius (°F = 9/5 °C + 32 and °C = 5/9 (°F – 32))				
0	= -17.8	80	= 26.7	200 = 93.3
32	= 0	90	= 32.2	250 = 121.1
40	= 4.4	100	= 37.8	300 = 148.9
50	= 10.0	110	= 43.3	400 = 204.4
60	= 15.6	120	= 48.9	500 = 260
70	= 21.1	150	= 65.6	1000 = 537.8
Pressure: Bars = Pounds per square inch				
1 Bar	= 14.5 psi	5 Bars	= 72.5 psi	9 Bars = 130.5 psi
2 bars	= 29.0 psi	6 Bars	= 87.0 psi	10 Bars = 145.0 psi
3 Bars	= 43.5 psi	7 Bars	= 101.5 psi	
4 Bars	= 58.0 psi	8 Bars	= 116.0 psi	